BULLETIN
du MUSÉUM NATIONAL d'HISTOIRE NATURELLE

PUBLICATION BIMESTRIELLE

zoologie

289

N° 412 SEPTEMBRE-OCTOBRE 1976

BULLETIN
du
MUSÉUM NATIONAL D'HISTOIRE NATURELLE

57, rue Cuvier, 75005 Paris

Le *Bulletin du Muséum national d'Histoire naturelle*, revue bimestrielle, paraît depuis 1895 et publie des travaux originaux relatifs aux diverses branches de la Science.

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International Standard Serial Number (ISSN) : 0027-4070.

BULLETIN DU MUSÉUM NATIONAL D'HISTOIRE NATURELLE
3e série, no 412, septembre-octobre 1976, Zoologie 289

The Sipalini of French Guiana (Coleoptera, Curculionidae, Rhynchophorinae) [1]

by Patricia Vaurie *

Résumé. — Dix espèces appartenant à trois genres (*Rhinostomus*, *Mesocordylus*, *Orthognathus*) de la tribu des Sipalini sont signalées de la Guyane française. Leur répartition en Guyane, ainsi que leur répartition générale, est donnée. Des clefs sont présentées pour les genres de la tribu dans le Nouveau Monde, ainsi que pour les espèces de la Guyane française.

Abstract. — Ten species belonging to three genera (*Rhinostomus*, *Mesocordylus*, *Orthognathus*) of the tribe Sipalini are reported from French Guiana. Their distribution in French Guiana, as well as their general range, is given. Keys are presented to the genera of the tribe in the New World as well as to the species in French Guiana.

The largest collections from French Guiana and in some cases the only specimens from that country are in the Muséum national d'Histoire naturelle, Paris, which recently (1969) sent an expedition there. Ten of the 36 species of the neotropical curculionid tribe, Sipalini, have been found in French Guiana. Previous to my revision (Vaurie, 1970, June, December, 1971) of these little known, dark-colored weevils, only two species (*Mesocordylus rugicollis* and *striatus* of Boheman) had been described from French Guiana, and the catalogues of Junk and Blackwelder listed only these two as occurring there. Prudhomme (1906), however, had already collected *Rhinostomus barbirostris* (Fabricius) in French Guiana and he listed also *Mesocordylus* and *Orthognathus*, but without species. Since 1971 additional records of Sipalini have accumulated, and I present herewith those pertaining to the species of French Guiana.

The tribe is composed of five genera, one (*Sipalinus*) in Africa and Asia, one (*Yuccaborus*) in North America, and three genera found chiefly in South America. (Another genus, *Nudoderes* Hustache, appearing in catalogues under the tribe Sipalini, was synonymized by Kuschel in 1955 with *Ithaura* Pascoe, in a different subfamily, the Hylobiinae.)

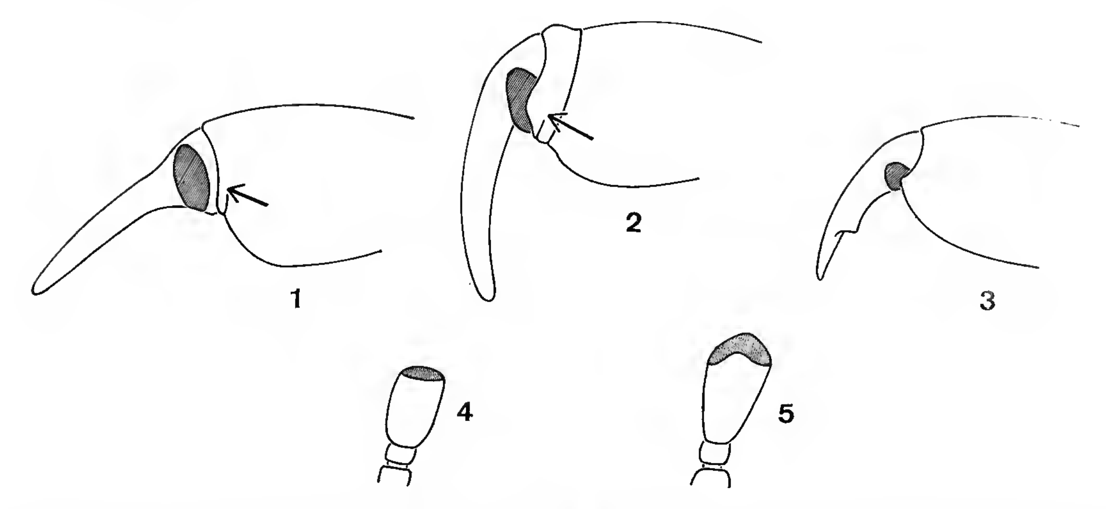
The species of the genera *Rhinostomus*, *Mesocordylus*, and *Orthognathus* in French Guiana can be recognized as follows : They are medium to large (generally from 12 to 50 mm) ; elongate, oblong, cylindrical in shape ; and black or brownish in coloration. In contrast to many Curculionidae they have no scales, but they can have hairs, or, on the elytra, rows of silky or rather tomentose, whitish granular spots ; some species have an over-all

1. Contribution à l'étude de la faune entomologique de la Guyane française.

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shining glaze. The eyes of these nocturnal weevils are very large, meeting under the head; the antennae are elbowed, and composed of a six-segmented funiculus, a scape, and a partially or almost entirely spongy club. The pygidium is mostly covered by the punctate-striate elytra, not truly exposed as in other Rhynchophorinae. The mandibles on their inner surface are convex and smooth, not dentate, forming little ears or " oreillettes ". The mesepimeron is proportionally small, ascending angularly; the femora and tibiae are unarmed; the claws divergent.

Probably the only well known species is the large *Rhinostomus barbirostris*, the male of which is instantly recognizable by its very long front legs and long, straight bottle-brush rostrum that bristles with golden-red hairs and dorsal teeth. This species breeds in and causes damage to palm trees, especially coconut palms. At least some of the species of *Mesocordylus* have the same habits, but ecological information is lacking for most species. The sexes are strongly dimorphic in *barbirostris*, as the female lacks the bearded rostrum, hers being more modest and also smooth. In other species of the tribe the sexes are differentiated also by the rostrum.



Figs. 1-5. — Genera of Sipalini : 1, *Rhinostomus* ; 2, *Mesocordylus* ; 3. *Orthognathus*, male, showing rostral tooth ; 4, Antennal club, *Mesocordylus cerinus* and *striatus* ; 5. Antennal club, *Mesocordylus eurytrema* and *scutellaris*.

Key to the genera of Sipalini in the New World

1. Eyes virtually contiguous on top of head; pronotum without postocular lobe (fig. 1); third tarsal segment dilated and bilobed; at least one pair of tibiae dentate on inner edge (teeth may be very small) .... *Rhinostomus*
   Eyes widely separated by width of base of beak; pronotum with strong or feeble postocular lobe (figs. 2, 3); third tarsal segment narrow, linear; tibiae not dentate on inner edge.. 2
2. Metepisternum flat, narrow, generally with only 1 row of punctures and at middle not wider than last (marginal) elytral interval; beak behind apex subcylindrical; hind tibiae linear (but feebly widened at apex in 3 species) .... *Mesocordylus*

Metepisternum convex, wide, with from 2 to 4 or 5 rows of punctures and at middle almost twice width of last elytral interval ; beak behind apex compressed, flattened laterally, its lower edge margined ; hind tibiae at apex twice or more their width at base..... *Orthognathus*

Genus **RHINOSTOMUS** Rafinesque, 1815

SYNONYM : *Harpacterus* Schoenherr, 1845.

The earlier name *Rhina* Latreille, 1802, was found to be preoccupied (International Commission of Zoological Nomenclature, 1955, Opinions and Declarations, vol. 10, pt. 12 : 355-388).

Two of the seven species of the genus are found in French Guiana ; of the other species, two inhabit the Greater Antilles (*oblitus*, *scrutator*), one (*meldolae*) the Andaman Islands [1], one Africa (*niger*), and one (*thompsoni*), Colombia and Ecuador.

KEY TO THE SPECIES OF *Rhinostomus* IN FRENCH GUIANA

— Front coxae separated by twice or more width of antennal club ; club almost entirely spongy ; front tibia with teeth on inner edge as long as tibia is wide ; femur scarcely punctate ; beak of male with brush of long, golden-red hairs and with dorsal dentations ; 12 to 53 mm. (without beak).. *barbirostris*

— Front coxae virtually contiguous, separated by width of antennal segments ; club with spongy part one-half or two-thirds longer than horny base ; front tibia with inner teeth minute, not always visible due to hairs ; femur strongly punctate ; beak of male not as stated above ; 12 to 16 mm (without beak).. *quadrisignatus*

Rhinostomus barbirostris (Fabricius, 1775)

SYNONYMS : *R. affaber*, *costalis*, and *ebriosa* Fahraeus, 1838 ; *Curculio validus* Panzer, 1798 ; *R. verrirostris* Illiger, 1806.

Cayenne ; Roches de Kourou ; St Jean du Maroni ; St Laurent du Maroni. 21 specimens.

This species, the type of the genus, occurs in western and southern Mexico and ranges south through Central America (excluding the Antilles) to the island of Trinidad and all South America (except Chile).

Rhinostomus quadrisignatus (Boheman, 1845)

SYNONYM : *Harpacterus ebeninus* Boheman, 1845.

Guatimala ; Rivière de Kourou (new locality) ; St Laurent du Maroni — 3 specimens.

When greased this species, viewed at a glance, might be mistaken for small females

1. The type of *Rhina lineata* Desbrochers des Loges, 1890 (type locality, Andaman Islands), a synonym of *meldolae* Pascoe, was not found at the time of my revision, but has now been identified in the Paris Museum — a male in perfect condition with the name and locality in the author' shandwriting and agreeing with his detailed description.

of *barbirostris* although the rostrum and other characters differ (see key above). The known range outside of French Guiana covers Brazil (type locality), Peru, and Ecuador, with the addition herewith of new localities in Venezuela (Rancho Grande, Aragua), and Colombia (Leticia, Amazonas), and Surinam.

Genus **MESOCORDYLUS** Lacordaire, 1866

Many of the species of this genus are uncommon in collections and they are readily overlooked, being black or brown and rather unattractive. They were previously included in the genus *Sipalinus* (= *Sipalus*) of the Old World before Lacordaire removed the New World species. Their geographic range extends from northwestern Mexico south through South America to northern Argentina, including some of the Greater and Lesser Antilles. There are 19 species in addition to the 7 found in French Guiana.

Key to the species of *Mesocordylus* in French Guiana

1. Elytral intervals either without pale spots or with numerous, dense, flattish spots separated by no more than twice their diameters (20 or more spots from base to apical declivity of elytra). 2
   Elytral intervals with widely separated (by from 3 to 8 times their diameters), pale, elevated, granular or hairy spots (from 2 to 15 or fewer from base to apical declivity of elytra) 5
2. Antennal club, viewed from outer side, with pale spongy apex virtually hidden, or visible only as a fine pale line (fig. 4) 3
   Antennal club, viewed from either side, with pale spongy apex small but distinct (perhaps one-fourth length of club) (fig. 5) 4
3. Dorsum covered with yellowish, enamel-like, glossy glaze; rostrum arcuate; pronotum with margin behind eye strongly lobed (post-ocular lobe), and dorsally behind apex feebly impressed; aedeagus at apex deeply U-shaped .... *cerinus*
   Dorsum blackish or grayish-opaque, mat; rostrum virtually straight; pronotum with margin behind eye feebly sinuate, and dorsally behind apex deeply impressed; aedeagus at apex scarcely emarginate .... *striatus*
4 (2). Pronotum distinctly longer than wide; rostrum on sides behind antennal insertion with spongy coating, when viewed from above, not or scarcely visible; aedeagus with apex U-shaped. .... *scutellaris*
   Pronotum as wide as, or wider than long; rostrum behind antennal insertion with spongy coating visible from above, covering outer third or fourth of rostrum; aedeagus with apex V-shaped .... *eurytrema*
5 (1). Tarsal soles rather spongy with hairs very short and not visible in dorsal view; elytra generally clearly marked with rows of large whitish spots contrasting with dark surface.... *subulatus*
   Tarsal soles more hairy than spongy, hairs sufficiently long to be visible, in dorsal view, from sides or apex; elytra generally with vesicular spots less evident, less contrasting on rather rough or opaque surface 6
6. Antennal club with spongy apex subtruncate and so small as to be scarcely visible (fig. 4); elytra with vesicular, tomentose spots narrower than intervals .... *apiciclava*
   Antennal club with spongy apex subacuminate, small, but about one fourth length of club; elytra with tomentose spots as wide as intervals .... *rugicollis*

Mesocordylus cerinus Vaurie, 1970

La Forestière, Haut Maroni (type loeality ; type in Muséum national d'Histoire naturelle) ; also Rivière Lunier, new loeality. 2 speeimens.

So far as known, restrieted to Freneh Guiana.

Mesocordylus striatus (Boheman, 1838)

Cayenne (type loeality) ; Roehes de Kourou ; Environ St Georges, Rivière Oyapoek (new loeality). 15 speeimens.

A widespread speeies ranging from Central Ameriea to South Ameriea where it has been eolleeted in Bolivia, Brazil, Guyana, Surinam, Colombia, and Peru.

Mesocordylus scutellaris (Erichson, 1847)

Synonym : *Mesocordylus glaber* Voss, 1947.

St Laurent du Maroni ; Nouveau Chantier, Bas Maroni. 3 speeimens.

Further distribution of this species is in Costa Riea, Colombia, Eeuador, and Peru (type loeality).

Mesocordylus eurytrema Vaurie, 1970

Cayenne (type locality) ; St Laurent du Maroni. 5 speeimens.

One speeimen has been seen from Peru.

Mesocordylus subulatus (Germar, 1824)

Synonym : *Sipalus sphacelatus* Boheman, 1838.

Maroni ; Nouveau Chantier (new loeality). 4 specimens.

This speeies oeeurs also in Costa Riea, Nicaragua, and Panama in Central Ameriea, and in Bolivia, Brazil (type locality), Colombia, Eeuador, and Peru in South Ameriea. The size and spaeing of the white spots on the elytra are variable.

Mesocordylus apiciclava Vaurie, 1970

St Laurent du Maroni (type locality ; type in Paris Museum). 5 speeimens.

At the time of my revision (1970) I had no females, but have now seen three. Previously I thought this species might be the male of *rugicollis* as they are so similar, espe-

cially the females. However, as the aedeagus of *apiciclava* is so distinctive (lacking the apical emargination of the majority of the species), it seems best to await males of *rugicollis* before making a change. Outside of French Guiana, *apiciclava* occurs in the Amazon River basin in Brazil.

Mesocordylus rugicollis (Boheman, 1845)

Cayenne (type locality). 3 females. This is the only locality yet recorded for this species.

Genus **ORTHOGNATHUS** Schoenherr, 1838

The three species of this genus occur from the southwestern part of the United States south to Panama and Venezuela (*subparallelus* Chevrolat, 1880) ; in South America in the northeast and northwest (*imaginis* Vaurie, 1970) ; and in southeastern Brazil and western Bolivia (*lividus* Gyllenhal, 1838). Examples have been seen as small as 5 mm (*lividus*) and as large as 17 mm (*subparallelus*). *O. subparallelus* has been collected at lights.

Although only *imaginis* has been found in French Guiana, I give below a key to all 3 species because my former key (1970 : 75) has become inadequate with the examination of additional material.

Revised key to the species of *Orthognathus*

1. Front tibia at apex bilobed and deeply emarginate ; hind tibia at inner apex with large blunt lobe ; beak of male with 2 pendant teeth in front of antennal insertion (fig. 3)...... *lividus*
   Front tibia at apex obliquely truncate (in some specimens feebly emarginate) ; hind tibia at inner apex with hook, sharp tooth, or acuminate lobe ; beak of male not toothed, but generally with median semi-lunar disc ventrally... 2
2. Hind tibia at inner apex (in lateral view) with angularly bent backward hook ; antennal club symmetrical, its spongy apex about one-fourth length of club (fig. 5)...... *subparallelus*
   Hind tibia at inner apex (in lateral view) appearing as sharp tooth or (in frontal view) as acuminate lobe ; antennal club asymmetrical, its spongy apex flattened and scarcely visible in lateral view... *imaginis*

Orthognathus imaginis Vaurie, 1970

Maroni. 2 specimens.

Additional localities in South America where *imaginis* occurs are to the south along the Rio Tapajoz in Para, Brazil, and on the western coast in Guayas Province, Ecuador (type locality), also inland in Loreto Province, Peru.

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Manuscrit déposé le 15 janvier 1976.

Bull. Mus. natn. Hist. nat., Paris, 3e sér., nº 412, sept.-oct. 1976, Zoologie 289 : 1227-1233.

Achevé d'imprimer le 28 février 1977.

IMPRIMERIE NATIONALE

6 564 004 5

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